

29. (New) An assemblage of floor tiles comprising:

a plurality of polymeric bases, each having top and bottom surfaces, and of substantially equal thickness, each base having first and second sets of adjoining edge portions formed on the top and bottom surfaces, each set of adjoining edge portions adjoining one another at substantially right angles, the first set of adjoining edge portions having a top surface substantially flush and contiguous with the top surface of the polymeric base, the second set of adjoining edge portions having a bottom surface substantially flush and adjoining the bottom surface of the polymeric base, the first and second sets of adjoining edge portions having a thickness that is less than that of the adjoining portions of the base;

first and second sets of interlocks that are molded into the first and second sets of the edge portions, respectively, the first interlock sets disposed inwardly of the base edge and projecting downwardly from the first edge portion thereof and the second interlock sets disposed inwardly of the base edge and projecting upwardly from the second edge portion thereof, whereby the first set of interlocks are beneath the top surface of the base and the second sets of interlocks are above the bottom surface of the base; and

a decorative layer applied to the top surface of the base for simulating an appearance that is different from that of the polymeric base.

REMARKS

Claims 1-27 and 29 are pending. Claims 1, 20 and 21 have been amended to more clearly define Applicant's invention. Claim 28 has been canceled, without prejudice or disclaimer. Claim 29 is new. Claims 1, 21, 26 and 29 are independent. In the Office Action, Claims 1 and 20 were rejected under 35 USC §112, second paragraph as indefinite. Claims 1 and 20 have been amended, thereby obviating the rejection. Claims 1-4, 8-12, 13-16, 18, 19 and 20-25 were rejected under 35 USC § 102(e) as anticipated by US Patent Application Publication No. US 2001/0039781 (Oh). Claims 5-7 and 28 were

rejected under 35 USC § 103(a) as unpatentable over Oh in view of US Patent No. 6,035,928 (Ruppel). Claims 17, 26 and 27 were rejected under 35 USC § 103(a) as being unpatentable in view of Oh.

The aspect of the present invention, set forth in amended independent Claim 1 is directed to a floor tile that includes a flat, elongated polmeric base having a top surface, a bottom surface, a distal end and a proximal end. A longitudinal axis is disposed between and substantially parallel to the side planes. A plurality of stepped edges are formed on each of the distal and proximal ends of the base. Each of the plurality of stepped edges are formed by adjoining longitudinal and transverse edge portions, the longitudinal edge portion of one edge lying in a longitudinal plane inward of one of the side planes and extending substantially parallel.

As understood by Applicant, Oh relates to a waterproofing system for concrete slabs of a flat roof. Hollow plastic panels of designed size, different thickness and a tongue-and-groove joint are covered by a supplementary waterproofing layer using sheet membrane materials such as asphalt sheet, metal sheet and other sheets on the vertical surface. The waterproofing layer permits drainage of stagnant water.

Applicant submits that nothing has been found in Oh that would teach or suggest a plurality of stepped edges that are formed on each of the distal and proximal ends of the base, as recited in Claim 1. Furthermore, Applicant submits that nothing has been found in Oh that would teach or suggest that each of the plurality of stepped edges are formed by adjoining longitudinal and transverse edge portions, the longitudinal edge portion of one edge lying in a longitudinal plane inward of one of the side planes and extending substantially parallel, as recited in independent Claim 1. Therefore, Applicant submits that Claim 1 is allowable.

Independent Claim 21 relates to a floor tile assembly that includes a plurality of mutually adjacent tiles mechanically interlocked along the sides for adhesive-free mounting to a surface. Each of the tiles includes an elongated base of substantially solid rectangular cross-section of substantially equal width and having a longitudinal axis, a top and bottom surface and first and second substantially linear peripheral edges that form substantially straight borders. A pair of open-sided interlock structures are molded in the base extending parallel to and adjacent to different ones of the first and second edges. The open side of the interlock structure adjacent the first side edge facing the bottom surface is disposed to engage a mating interlock structure of another adjacent tile from the top of the base. A plurality of transverse stepped end surfaces are formed on opposite ends of the base.

Applicant submits that nothing has been found in Oh that would teach or suggest a plurality of transverse stepped end surfaces that are formed on opposite ends of the base, as recited in independent Claim 21. Therefore, Applicant submits that Claim 21 is allowable.

Independent Claim 26 relates to a floor tile molded of polymeric material that includes a plurality of flat, elongated tile sections of substantially equal length. Each of the plurality of tile sections has adjoining top surfaces of generally rectangular shape. The plurality of tile sections are joined in a parallel longitudinally staggered relationship to simulate the staggering of abutting elongated boards in a wooden floor installation. A decorative layer on the top surface simulates a wood grain in each tile section. A matable interlock portion formed on the edges of the sections mechanically interlock the tile to similarly staggered tiles having matable interlock portions thereon.

Applicant submits that nothing has been found in Oh that would teach or suggest that the plurality of tile sections are joined in a parallel longitudinally staggered relationship to simulate the staggering of abutting elongated boards in

a wooden floor installation, as recited in Claim 26. Therefore, Applicant submits that Claim 26 is allowable.

New independent Claim 29 relates to an assemblage of floor tiles that includes a plurality of polymeric bases, each having top and bottom surfaces, and being of substantially equal thickness. Each base has first and second sets of adjoining edge portions formed on the top and bottom surfaces. Each set of adjoining edge portions joins one another at substantially right angles, the first set of adjoining edge portions having a top surface substantially flush and contiguous with the top surface of the polymeric base. The second set of adjoining edge portions has a bottom surface substantially flush and adjoining the bottom surface of the polymeric base. The first and second sets of adjoining edge portions have a thickness that is less than that of the adjoining portions of the base. First and second sets of interlocks are molded into the first and second sets of the edge portions, respectively. The first interlock sets are disposed inwardly of the base edge and project downwardly from the first edge portion thereof. The second interlock set is disposed inwardly of the base edge and projects upwardly from the second edge portion. The first set of interlocks is beneath the top surface of the base and the second sets of interlocks are above the bottom surface of the base. A decorative layer is applied to the top surface of the base to simulate an appearance that is different from that of the polymeric base.

Applicant submits that new Claim 29 is novel and unobvious in view of the prior art of record.

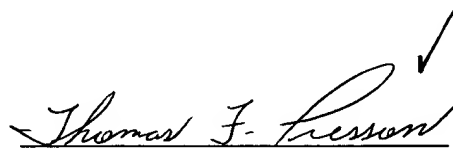
The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual

reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's attorney may be reached by telephone at (203) 924-3845. All correspondence should continue to be directed to the below-listed address.

Respectfully submitted,



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VERSION SHOWING MARKED CHANGES

Paragraphs 002, 020 and 022 have been amended as follows:

[002] A floor tile molded from a polymeric material and having interlocking edge structures used in an adhesive-free floor installation is disclosed in co-pending U.S. Patent Application No. 09/152,684, now U.S. Patent No. 6,306,318, issued October 23, 2001, filed September 14, 1998, and assigned to the same assignee as the present invention. That application is hereby incorporated by reference in its entirety herein.

[020] Figure 1 illustrates a tile 10 constructed in accordance with this invention. The tile 10 is typically extruded from a granular matrix of polymeric material, such as polyvinyl chloride material. The granular polyvinyl chloride matrix may have carpet fibers, which can be recycled from carpet scrap, dispersed throughout the matrix, as described in co-pending U.S. Patent Application No. 09/152,684, now U.S. Patent No. 6,306,318, issued October 23, 2001, to provide a fiber-reinforced product should such be desired. That application is hereby incorporated by reference in its entirety herein.

[022] Figure 1 shows a floor tile base section 12, which is capable of being used as a substrate to which one or more additional surfaces may be adhered. For example, a first layer that is adhered to tile base section 12 can be a decorative layer. A second layer can be a protective layer that resists scuffing and abrasion. As shown in Figure 1, tile base section 12 is a flat, elongated substrate of polyvinyl chloride. As described in co-pending U.S. Patent Application No. 09/152,684, now U.S. Patent No. 6,306,318, issued October 23, 2001, the tile base or substrate 12, (also referred to as a backing herein) is typically made from

recycled carpet squares and contains about 25% to about 90% by weight of flexible polyvinyl chloride and can also contain up to about 5% of a polyethylene copolymer. Alternatively, the base 12 may be fabricated from virgin polyvinyl chloride resin having a Shore A hardness ranging from, for example, about 40 to about 100 with little or no fiber content for reinforcement purposes.

IN THE CLAIMS

Claims 1, 20 and 21 are amended as follows:

1. (Amended) A floor tile comprising:

a flat, elongated base having a top surface, a bottom surface, a distal end and a proximal end, said base composed of a polymeric material and having a solid cross-section;

first and second opposite sides lying in respective first and second substantially parallel side planes;

a longitudinal axis disposed between and substantially parallel to said side planes; and

[one or more] a plurality of stepped edges formed on each of said distal and proximal ends of the base, [the one or more] each of the plurality of stepped edges formed by adjoining longitudinal and transverse edge portions, the longitudinal edge portion of one said edge lying in a longitudinal plane inward of one of said side planes and extending substantially parallel thereto.

20. (Amended) The tile as claimed in Claim 1, wherein the step edges have longitudinal and transverse intersecting portions to simulate transverse staggering between individual boards of a wood floor.

21. (Amended) A floor tile assembly comprising:

a plurality of mutually adjacent tiles mechanically interlocked along the sides thereof for adhesive-free mounting to a surface,

wherein, each of said tiles comprises an elongated base of substantially solid rectangular cross-section of substantially equal width and having a longitudinal axis, a top and bottom surface and first and second substantially linear peripheral edges forming substantially straight borders, a pair of open-sided interlock structures molded in said base extending parallel to and adjacent to different ones of said first and second edges, the open side of the interlock structure adjacent the first side edge facing the bottom surface is disposed to engage a mating interlock structure of another adjacent tile from the top of said base, and a plurality of transverse stepped end surfaces formed on opposite ends of said base.

Please add new Claim 29 as follows:

--29. (New) An assemblage of floor tiles comprising:

a plurality of polymeric bases, each having top and bottom surfaces, and of substantially equal thickness, each base having first and second sets of adjoining edge portions formed on the top and bottom surfaces, each set of adjoining edge portions adjoining one another at substantially right angles, the first set of adjoining edge portions having a top surface substantially flush and contiguous with the top surface of the polymeric base, the second set of adjoining edge portions having a bottom surface substantially flush and adjoining the bottom surface of the polymeric base, the first and second sets of adjoining

edge portions having a thickness that is less than that of the adjoining portions of the base;

first and second sets of interlocks that are molded into the first and second sets of the edge portions, respectively, the first interlock sets disposed inwardly of the base edge and projecting downwardly from the first edge portion thereof and the second interlock sets disposed inwardly of the base edge and projecting upwardly from the second edge portion thereof, whereby the first set of interlocks are beneath the top surface of the base and the second sets of interlocks are above the bottom surface of the base; and

a decorative layer applied to the top surface of the base for simulating an appearance that is different from that of the polymeric base. --